

# TRANSMITTAL OF APPEAL BRIEF

Docket No.

11011(01),11111			03652/0	000K015-US0
In re Application of: William E. Pence				
Application No.	Filing Date	Exa	miner	Group Art Unit
10/017,498	December 14, 2001	С. Н.	. Hewitt	3621
Invention: METHOD AND APPARATUS FOR DYNAMIC RENEWABILITY OF CONTENT				
TO THE COMMISSIONER OF PATENTS:				
Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: October 13, 2004 .				
The fee for filing this Appea	l Brief is \$500.00	•		
X Large Entity	Small Entity			
X A petition for extension	on of time is also enclosed.			
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Charge the amount of the fee to Deposit Account No. This sheet is submitted in duplicate.				
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The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. 04-0100  This sheet is submitted in duplicate.				
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Docket No.: 03652/000K015-US0

(PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

William E. Pence et al.

Customer No.: 07278

Application No.: 10/017,498

Group Art Unit: 3621

Filed: December 14, 2001

Examiner: Calvin L. HEWITT

For: METHOD AND APPARATUS FOR DYNAMIC RENEWABILITY OF

CONTENT

## **APPEAL BRIEF**

MAIL STOP Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Appellants submit this Appeal Brief in triplicate as required by 37 C.F.R. § 1.192. A Notice of Appeal was filed October 13, 2004 in response to the Final Office Action mailed July 13, 2004. Appellants submit concurrently herewith the required fee for this Brief pursuant to 37 C.F.R. § § 1.192 and 1.17(f). It is believed that no additional fees are required for this submission. However, should it be determined that additional fees are required or that any refund is due in connection with this application, the Commissioner is hereby authorized to charge the required fee(s) and/or credit the refund(s) due to Deposit Account No. 04-0100.

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Docket No.: 03652/000K015-US0

## **REAL PARTY IN INTEREST**

The real party in interest is the assignee of the Appellants. The assignee of record is Duet General Partnership, which changed its name to Napster LLC. Appellants are inventors William E. Pence, Dik Langan, Cynthia Healy, Geoff Schreiber, and Donna Penick.

### RELATED APPEALS AND INTERFERENCES

Appellants' attorney is not aware of any other related appeals and/or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## **STATUS OF THE CLAIMS**

This is an appeal from the Examiner's rejection of claims 1-22 [sic], in a Final Office Action dated July 13, 2004. Appellants note that the Final Office Action dated July 13, 2004 states that claim 10 is included in the rejection. However, claim 10 was cancelled in the Amendment dated October 1, 2003. Claims 1-9 and 11-22 are pending and are the subject of this Brief. Appellants, from this point forward, will address their comments to the actual claims pending. The claims are set forth in Exhibit A immediately following this Brief.

# STATUS OF AMENDMENTS

The Amendment submitted by Appellants on March 31, 2004 and Supplemental Arguments filed April 5, 2004 have been entered. Appellants have not submitted an amendment subsequent to the Final Office Action of July 13, 2004.

# SUMMARY OF THE INVENTION

The present invention relates to a method and apparatus for dynamically and transparently loading and renewing the licenses associated with downloaded content. Any type of content can be regulated, but examples of some types of content are audio music files or video movie files. Licensing associated with content can allow the provider to retain control over the content after it has been downloaded onto the user's computer. This protects the content from being copied, and enables a 'subscription model' for the continued use of the content wherein access to the content on the user's computer can be restricted if the user's account is not in good standing. This is in contrast to no protection or permanent protection. Permanent protection limits the number of times a user can use the content and/or the devices the content can be played back on. The protection is considered permanent because the protection cannot be changed after the content is purchased.

A License File or similar licensing parameter is the key to retaining control of the access to content after it has been downloaded. The License File contains numerous pieces of information regarding how the content can be consumed. Access restrictions can be based on the number of times the content can be accessed or a particular date after which the content is no longer accessible, or the type of device to which the content may be transferred. The License File may also include information about the specific computer the content was downloaded onto. A License File is sent to the user's computer without notifying the user, and then the content is downloaded or streamed to the user. Once the License File is transparently copied to the user's computer, a dynamic and transparent renewal method renews the License File on the user's computer, allowing the associated content to be used without disruption as long as the user's account is in good standing.

When a user requests access to content, the subscription service verifies the user's request and creates a License File to control access to the content. The License File is then downloaded to the user's computer without notifying the user and, in one embodiment, the content is then downloaded or streamed to the user. This allows constant control of access to the content without the user being aware of the controlling License File. One reason is that if a user attempts to copy the content, the License File is not copied with it and the user is denied access to the copy of the content. Denying access to improperly copied content prevents unauthorized copying.

Further, access to the content is granted continuously for as along as the user's account is in good standing. The License File must be updated to reflect the status of the user's subscription. In one embodiment, the License File is updated each time the user logs into the service. The updated License File is transparently renewed and the user is provided with uninterrupted access to his content. The transparent transmission of the License File allows the subscription service to retain control of the content without disrupting the user's continuous access to the content.

#### **ISSUES**

The first issue is whether claims 1-9 and 11-20 should be rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement and claims 1-9, 11-20 and 22 should be rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The second issue is whether claims 1-9, 11-20 and 22 should be rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

The third issue is whether claims 1-7 and 11-22 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,056,786 to Rivera et al. ("Rivera") in view of U.S. Patent No. 6,009,401 to Horstmann.

The fourth issue is whether claims 8 and 9 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Rivera in view of Horstmann and further in view of U.S. Patent No. 5,023,907 to Johnson et al.

### **GROUPING OF CLAIMS**

Independent claims 1 and 22 and dependent claims 2-9 are believed to be patentable over the cited art for the reasons set forth below. Claims 1-9 and 22 stand and fall together. Independent claims 19-21 and dependent claims 11-18 are believed to be patentable over the cited art for the reasons set forth below. Claims 11-21 stand or fall together and independently from the remaining claims.

#### ARGUMENTS

# (i) Rejection of claims 1-9, 11-20 and 22 under 35 U.S.C. § 112, first paragraph

(Issue No. 1) Claims 1-9 and 11-20 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement and claims 1-9, 11-20, and 22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The Examiner contends, for both the written description and enablement requirements, that the Specification is silent regarding the claim terms "renewing the parameters transparently" and "update said license file parameter transparently" and further that there is no enabling disclosure {W:\03652\000K015000\00270473.DOC \\ \empiron \empiron \)

because the Specification does not teach or suggest to one of ordinary skill in the art how to update or renew files transparently.

Claims 1 and 17-22 recite the elements of "transparently transmitting"; "transparently updating" or "transparently renewing" and Appellants respectfully submit that the claims comply with the written description requirement and that the invention is fully enabled to one of ordinary skill in the art.

Appellants disagree with the Examiner's statement that the written description does not support the "transparent" elements. The Specification and claim as originally filed clearly support the term "transparently". Claim 1, as filed, recited that the License Files are "transparently transmit[ed]" and "transparently renew[ed]".

Support for transparently transmitting files is in the Detailed Description. The Specification sets forth that when a user requests to download content that the "License Files are then sent to the user's computer without notifying the user, and then the content is downloaded or streamed to the user." Specification, page 8, lines 7-8. The Specification goes on to describe that the License Files are transparently transmitted to the user's computer either as part of the initial request for the content or as part of the process of renewing existing License Files. The License Files are transparently transmitted to prevent unauthorized use or copying of the content and the transmission does not interrupt a user's session.

Support for transparently renewing (or updating) files is also found in the Summary of the Invention. The Specification recites that the "present invention relates to a method and apparatus for dynamically and <u>transparently renewing the licenses</u> associated with downloaded content." Specification, page 4, lines 13-14. Further, License Files are transparently renewed to allow the user continuous access to content for as long as the user's subscription is in good standing.

Appellants submit that the Specification contains ample support for the claim terms of transparently transmitting, renewing and updating. In addition to literal support of the claim elements in the Specification, the written description requirement is also met because the disclosed subject matter inherently satisfies the claim elements at issue.

The definition of "transparent" is known to those of ordinary skill in the art, which definition may be found in may sources. For example, Webopedia.com (www.pcwebopaedia.com) describes itself as "The #1 online encyclopedia dedicated to computer technology", and defines "transparent" as:

Invisible. In computer software, an action is transparent if it takes place without any visible effect. Transparency is usually considered to be a good characteristic of a system because it shields the user from the system's complexity.

Additionally, Appellants attach hereto, as Exhibit B, a copy of the definition of "transparency" and "transparent" from Newton's Telecom Dictionary, 18<sup>th</sup> Edition, *CMP Books*, 2002, page 763. "Transparency" is defined there as the "transportation of information invisible to the user" and "transparent" as a "feature ... the user ... is totally unaware that it exists."

Further, in the Final Office Action the Examiner provided a definition of "transparent" from the Microsoft Press Computer Dictionary:

Pertaining to, or characteristic of a device, function, or part of a program that works so smoothly and easily that it is invisible to the user. For example, the ability of one application to use files created by another is transparent if the user encounters no difficulty in opening, reading, or using the second program's files or does not even know the use is occurring.

Appellants submit that at the time of the present invention, one of ordinary skill in the art would know the definition of "transparent" in the context of the Specification, as "invisible" in that the user is unaware of an action of a program. Thus, to transparently transmit, renew, or update (i.e., without notifying a user) is supported by the present specification.

Further, the Examiner contends that the Specification does not enable the invention by providing one of ordinary skill in the art the necessary information to make and use the present invention. Appellants respectfully traverse the Examiner's contention.

A review of the prior art illustrates that the "transparent" handling of files is known and within the knowledge of one of ordinary skill in the art. Thus, the Specification, along with the knowledge of one of ordinary skill in the art enables one to make and practice the invention.

For example, U.S. Patent No. 6,519,624 ("the '624 patent" - attached hereto as Exhibit C), filed in the U.S. on April 28, 1999 (over 1 ½ years before the present application) discloses a data transmission/receiving system for exchanging data records between two computer nodes. The invention of the '624 patent determines the most efficient communications network between the two nodes to transmit data. The analysis is based on the size of the data and the speed of the network and the data is transmitted over the most efficient network. The "transmission takes place transparently for the user of the client application and other applications ... [Thus,] the solution taught by the invention is particularly user-friendly, and does not require any modifications to existing applications." The '624 patent, column 2, lines 6-11.

transparently" and "transparent switching" which suggest that there is enough support in the '624 patent to describe and enable the "transparent" element of the claims.

The transparent switching elements are supported by the disclosure in only two locations in the Detailed Description that describe performing actions "transparently." The '624 patent, column 4, lines 5-11, discloses that the "communications application CA1 hereby transmits a data record which is transmitted to it in the computer node CN1 for transfer to the computer node CN3, transparently for the applications A and the user U1, to the communications application CA3." Further, the "program module CRA delivers a data record transmitted by one of the computer nodes CN1 to CN2 to the computer node CN3, switches transparently between the different methods of receipt for such data records to be delivered, and controls the receipt of such data records by means of the program modules WS and BCS." The '624 patent, column 7, lines 3-8.

Appellants assert that one of ordinary skill in the art possesses the knowledge to transparently transmit a file to a user and that the claims of the '624 patent are enabled for one of ordinary skill in the art. The disclosure of both the present Specification and the '624 patent illustrate that the basic concept of transparently transmitting a file is well known, such that the mechanics of such a process need not be described in detail. Appellants submit that the novelty of the presently claimed invention includes a method and apparatus of protecting electronic content by transmitting and renewing License Files without notifying a user (i.e. transparently) and not the particular way to transparently transmit the file itself.

In the present case, one of ordinary skill in the art has been provided with sufficient written description and possesses the knowledge to transparently transmit files to a user and the Specification and claims meet the disclosure requirements under 35 U.S.C. § 112, first paragraph. Thus, Appellants respectfully request that the above rejection be withdrawn or reversed.

# (ii) Rejection of claims 1-9, 11-20 and 22 under 35 U.S.C. § 112, second paragraph

(Issue No. 2) Claims 1-9, 11-20 and 22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The Examiner contends that the Specification is silent regarding "renewing the parameters transparently" and "update said license file parameter transparently" and further does not provide enough information to teach or suggest to one of ordinary skill in the art how to update or renew transparently. Appellants respectfully submit that the claims particularly point out and claim the subject matter of the invention.

Similar to Issue No. 1 above, the Specification is not silent as to the terms "transparently renewing" and "transparently updating". All of the arguments presented to refute the Examiner's rejection under 35 U.S.C. § 112, first paragraph, also apply to this issue. The Specification clearly states that the "present invention relates to a method and apparatus for dynamically and transparently renewing the licenses associated with downloaded content." Specification, page 4, lines 13-14. Additionally, when a user requests to download content, "License Files are then sent to the user's computer without notifying the user, and then the content is downloaded or streamed to the user." Specification, page 8, lines 7-8. Appellants again submit that the Specification is not silent on the element of renewing or updating the parameters without notifying the user.

Further to the § 112, first paragraph, arguments above, one of ordinary skill in the art has the ability to transparently transmit a file to a user. Appellants are claiming a new and novel way of protecting electronic content by transmitting and renewing License Files without notifying a user (i.e. transparently).

Appellants submit that the combination of the description in the Specification and the knowledge of a person of ordinary skill in the art provide the necessary teaching to render the claims definite. The Specification recites what the License Files do (control access to electronic content) when the license files should be sent to the user's computer (before or during download or stream and to refresh the license files with updated subscription information) and that the License Files are transmitted "transparently" and "without notifying the user". The definition of "transparent" is known to one of ordinary skill in the art and, one of ordinary skill in the art has the knowledge to transparently transmit a file. The combination of disclosed and known teachings renders definite the claimed steps, from claims 1-9, 11-20 and 22, as below:

"transparently transmitting the license file to the user without notifying the user;"

"transparently renewing the parameters without notifying the user in the license file ...;"

"transparently update said license file without notifying the user ... "; and

"transparently receiving, by the user, the license file."

The Specification provides sufficient information to render the claims definite and sufficiently point out the claimed subject matter. Thus, Appellants respectfully request that the above rejection be withdrawn or reversed.

# (iii) Rejection under 35 U.S.C. § 103(a)

(Issue No. 3) Claims 1-7 and 11-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,056,786 to Rivera et al. ("Rivera") in view of U.S. Patent No. 6,009,401 to Horstmann. The Examiner contends that Rivera discloses the entire invention, including creating a license file, storing license files, and a subscription management system. The

Examiner admits that Rivera does not disclose transmitting a license to a user, but that Horstmann discloses transmitting the license file.

Rivera discloses a method and system to monitor for license compliance for client-server software. Rivera discloses software that monitors the numbers of users for a server-based application. The software compares the number of concurrent users at any given time to the number of licenses for access that were purchased. Once the maximum number of concurrent users is reached, the system can either permit access and warn the user that more licenses are needed or lock out the additional user. Rivera tracks usage using an audit log that tracks all of the "log ons" and "log offs" of all the individual users and determines the number of concurrent users from the audit log. See, Rivera, Abstract, and column 6, lines 42-57.

Appellants disagree with the Examiner's reading of Rivera and submit that content is not transmitted during the monitoring process. Rivera only discloses transmitting the license monitoring software itself, not content separate from the license monitoring software. *See*, Rivera, column 5, lines 52-65. Rivera states that the "[s]oftware programming code which embodies the present invention ... may be distributed." Rivera, column 5, lines 52-62. Rivera does not teach or suggest the transmission of any file other than his own software.

Further, Rivera does not teach or suggest tracking the distribution of content. Rivera only tracks the number of users accessing a single program at a given time and determines if the number of users accessing the program exceeds the number of allowed users. Rivera discloses using "the audit log to determine the number of unique client entities that initiated transactions with the server program during a particular time interval ... [by counting] the number of users transacting with the server program ... for a number of time intervals during a time period." Rivera, column 6, lines 42-

54 and also see, Figures 3, 4 and 5. Thus, Rivera does not teach or suggest the distribution of content, along with a license file, as recited by the claims.

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The Examiner states that Rivera does not teach or suggest transmitting a License File to a user and contends that Horstmann discloses transmitting a license file to a user.

Horstmann discloses the relicensing of electronically purchased software. Horstmann assumes that license certificates are installed on a user's machine with the original software product. Once the user's hard drive fails, the components need to be reinstalled. Preferably, the license certificate is backed up by the end user onto a floppy. However, in an emergency, the license certificate is retrieved from a clearing house once the user has been authenticated. See, Horstmann, column 3, line 59 to column 4, line 11.

Appellants agree that Horstmann discloses transmitting a license file to a user. However, Appellants respectfully disagree with the Examiner in that Horstmann does not teach or suggest that the license file is "transparently" transmitted, updated and/or renewed. As argued above regarding the § 112 rejections, the Specification discloses that "transparently" transmitting a file happens invisibly, without the user's knowledge.

Appellants submit that Horstmann specifically teaches away from transparently transmitting license files because he transmits the license files with the user's knowledge. Horstmann's "license certificate is preferably backed up by the end user onto a floppy disk or other permanent storage medium ... [and] in an emergency, it may be retrieved from the clearinghouse or merchant." Horstmann, column 3, line 67 to column 4, line 6. The user must create the back-up or initiate the request for the license certificate and, thus, must have knowledge of the license certificate. Also, the user is fully aware when the license file is being transmitted because the user specifically requests the transmission when the original license file is damaged or lost. If the user is aware of the 

transmission of the license file the license file is never "transparently" transmitted, updated or renewed.

Further, Horstmann, if not teaching away as Appellants assert, is silent on how his license files are transmitted. Horstmann does not disclose that the license files are "transparently" transmitted. Additionally, there is no teaching or suggestion that one of ordinary skill in the art should transmit the license file "transparently". On the contrary, a user must be aware of the license file to know to back-up the file and to request a new license file if the old one is lost or destroyed.

Thus, Horstmann does not teach or disclose the transparent transmission, updating and/or renewing of the license file as required by the present claims. Additionally, the combination of Rivera and Horstmann do not disclose all the elements of the pending claims. Appellants respectfully submit that the present invention is nonobvious and the above rejection be withdrawn or reversed.

### (iv) Rejection under 35 U.S.C. § 103(a)

(Issue No. 4) Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rivera in view of Horstmann and further in view of U.S. Patent No. 5,023,907 to Johnson et al. ("Johnson"). The Examiner contends that Rivera and Horstmann disclose all the elements of these claims except generating individual license files for individual content or that one license file can be generated for a plurality of content files. The Examiner further states that Johnson discloses a licensing system that generates a single license for either individual content files or a plurality of content files.

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regulates access to the programs by tracking the number of concurrent users and does not generate

license files. See, Johnson, column 2, line 60 to column 3, line 42.

Appellants respectfully disagree with the Examiner. Claims 8 and 9 depend from claim 1

and are allowable for at least the reasons explained with respect to Issue No. 3 regarding claim 1.

Further, Johnson does not teach or suggest the elements lacking from both Rivera and Horstmann

and present in claims 8 and 9. Appellants respectfully submit that the present invention is not

obvious and the above rejection be withdrawn or reversed.

CONCLUSION

For the foregoing reasons, the final rejection of claims 1-9 and 11-22 should be

reconsidered by the Examiner or reversed in its entirety by the Board. Claims 1-9 and 11-22 are

supported, definite, enabled and patentable over the prior art of record. Accordingly, the

Examiner's finding of unpatentability should be reversed. Such a disposition is earnestly solicited.

Dated: December 20, 2004

Respectfully submitted,

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## LISTING OF THE CLAIMS

- 1. A method for dynamic renewability of content comprising the following steps:
- (a) creating a license file having one or more parameters for a content item requested by a user;
- (b) transmitting the requested content item from a provider system to the user;
- (c) transparently transmitting the license file to the user without notifying the user;
- (d) subsequent to steps (a), (b), and (c), comparing the one or more parameters contained in the license file to corresponding one or more parameters maintained by the provider system to determine whether or not the user is allowed access to the content; and
- (e) transparently renewing the parameters without notifying the user in the license file if the parameters in the license file differ from the corresponding parameters maintained by the provider system to allow continued access to the content by the user in accordance with the license file parameters maintained by the provider system.
- 2. The method of claim 1, wherein the license file parameters include one or more of the following parameters: date, user's country of origin, monetary value on account, user's technical information, type of content to be downloaded, number of times the content has been downloaded and grace periods.

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- 3. The method of claim 2, further comprising a step wherein the license file is created by a license server.
- 4. The method of claim 3, further comprising the step of storing the provider system license file parameters using a subscription management system.
- 5. The method of claim 4, further comprising the step of storing one or more user license file parameters in a registry.
- 6. The method of claim 5, further comprising the step of storing the content item on a content server which is part of the provider system.
- 7. The method of claim 6, further comprising the step of recording the user downloaded content in a user's local database.
- 8. The method of claim 1, wherein individual license files are created for individual content items.
- 9. The method of claim 1, wherein one license file is created for a plurality of content items, said license file including one or more parameters for each content item.
  - 10. (Canceled)

- 11. The system of claim 21, wherein said provider system further comprises a subscription management service, operable to monitor and maintain said one or more license file parameters.
- 12. The system of claim 11, wherein said user system further comprises a client application for receiving user input and providing said user input to said communication application, said license storage and said content storage.
- 13. The system of claim 12, wherein said one or more license file parameters comprise one or more of the following parameters: date, user's country of origin, monetary value on account, user's technical information, type of content to be downloaded, number of times the content has been downloaded and grace periods.
- 14. The system of claim 13, wherein said license server is operable to create said license file.
- 15. The system of claim 14, wherein said communication server is operable to receive said license file from said license file server and to transmit said license file with said content to said user system.

- 16. The system of claim 15, wherein said subscription management service is operable to compare license file parameters on the content provider system and the license file parameters on the user system.
- 17. The system of claim 16, wherein the provider system further comprises a means to transparently update said license file without notifying the user by communicating an updated license file from the provider system to said user system.
- 18. The system of claim 17, wherein the provider system further comprises a means to transparently update said license file without notifying the user by communicating an updated license file parameter from the provider system to said user system.
- 19. A computer readable medium encoded with processing instructions for performing a method for facilitating a dynamic renewability of content between a provider system and a user system, comprising the following steps:
- (a) creating a license file having one or more parameters for a content item requested by a user;
- (b) transmitting the requested content item from a provider system to the user;
- (c) transparently transmitting the license file to the user without notifying the user;

- (d) subsequent to steps (a), (b), and (c), comparing the one or more parameters contained in the license file to corresponding one or more parameters maintained by the provider system to determine whether or not the user is allowed access to the content; and
- (e) transparently renewing the parameters in the license file without notifying the user if the parameters in the license file differ from the corresponding parameters maintained by the provider system to allow continued access to the content by the user in accordance with the license file parameters maintained by the provider system.
- 20. An apparatus for facilitating a dynamic renewability of content between a provider system and a user system, the apparatus comprising:

a processor; and

- a memory storing processing instructions for controlling the processor, the processor operative with the processing instructions to:
- (a) create a license file having one or more parameters for a content item requested by a user;
  - (b) transmit the requested content item from a provider system to the user;
- (c) transparently transmit the license file to the user without notifying the user;
- (d) subsequent to steps (a), (b), and (c), compare the one or more parameters contained in the license file to the corresponding one or more parameters

maintained by the provider system to determine whether or not the user is allowed access to the content; and

- (e) transparently renew the parameters in the license file without notifying the user if the parameters in the license file differ from the corresponding parameters maintained by the provider system to allow continued access to the content by the user in accordance with the license file parameters maintained by the provider system.
- 21. An apparatus for providing dynamic renewability for content provided from a content provider to a user, comprising:
  - a content provider system, said content provider system including:
  - a content server, operable to store and retrieve content items;
- a communication server, operable to communicate with said user, said communication server operable to receive content items from said content server and to communicate said content items to said user;
- a license server, operable to monitor the amount and type of content to be communicated to said user, said license server having stored thereon one or more license files, each said license file containing one or more parameters relating to one of said content items; and
  - a user system, said user system including:
- a communication application, operable to communicate with said communication server in order to receive content items and license files;

a license storage, operable to store said one or more license files on said user system; and

a content storage, operable to store content items requested by said user and received from said content provider system, wherein said content provider system further comprises a means to transparently transmit said license files to said user without notifying said user.

- 22. A method for downloading and renewing content for a user, comprising the steps of:
  - (a) requesting, by the user, a content item;
- (b) processing the user's request at a provider system, wherein the processing step comprises the step of creating a license file having one or more parameters for the content item;
  - (c) receiving, by the user, the requested content item;
  - (d) transparently receiving, by the user, the license file;
- (e) allowing continued access to the content item by the user in accordance with the license file by transparently renewing the one or more parameters in the license file if the parameters in the license file differ from the corresponding parameters maintained by the provider system, such that the user is unaware of the renewing of the one or more parameters in the license file as the renewing is taking place.

ficient is inversely related to the quality of the link or

legary of control characters intended to control or help communication networks. See TCP.

haracters A group of characters used to facilitate is are NAK (Not acknowledge) and EOT (end of trans-

rotocol TCP. A specification for software that bun-I bundles incoming data), manages the transmission for errors. TCP is the portion of the TCP/IP protocol equential data. In more technical terms, Transmission 1 transport layer protocol. Corresponds to OSI layer 4, ion-oriented, end-to-end protocol. It provides reliable. of bytes to a remote or local user. TCP provides reliween pairs of processes in hosts attached to interconthe TCP/IP protocol suite that governs the exchange much longer explanation.

ence IC. Transmission Convergence Sublayer, a r (PHY). See TC.

cs Any of the various devices used in conjunction with onvert from one transmission method to another. cally include multiplexing equipment and Asynchronous

piece of a telecommunications system through which aple, a multi pair cable, a fiber optic cable, a coaxial

data structure, beginning and ending with delimiters, I by a protocol for the transmission of user and control

power of a transmission signal at a specific point on a

Int TLP. A designated physical point on a circuit where , is measured. Referencing this point in relation to othhe performance of the network. See also Level, Loss,

wavelengths above and below which the fiber ceases to 10 longer transmit information.

cial cable or waveguide used for connecting a transmit-

loss encountered in transmission through a system. rything, such as wire, coaxial cable, fiber optics, air or ctrical signal which has information. Transmission media If wire and optical fiber cable used for transmitting voice ile includes twisted pair, cooxial, and twinaxial. Optical rad, stranded, and ribbon.

es A stated set of desired performance characteristics ristics for which objectives are stated include loss, noise, tenuation distortion, envelope delay distortion, etc. See Radiation Pattern.

I The interface bit rate minus the overhead bits.

I O (TPO) OSI (Open Systems Interconnection) simple Class). This is the simplest OSI Transmission X.25 network (or other network that does not lose or

ii 4 (1p4) OSI (Open Systems Interconnections) or detection and recover class). This is the most power ful on top any type of network. TP4 is the OSI equivo-

/ Key TSK. A key that is used in the control of trans-

: frequency hopping and spread spectrum. umber of pulses or bits transmitted in a given period of er Second (BPS), Words Per Minute (WPM), Characters lly as Lines Per Minute (LPM) in printer transmission.

Skilled technologists can translate one to the other.

Transmissive The way many LCD (liquid crystal display) screens on laptops reflect

Transmit Bus In AT&T's Information Systems Network (ISN), the circuit on the backplane of the packet controller that transports message packets from sending device interface modules to the switch module.

Transmit Digital Intertie TDI. A 16-channel serial converter which converts the TDM Data Bus from parallel format to serial format for transmission between nodes. Transmittance The ratio of transmitted power to incident power. In optics, fre-

quently expressed as optical density or percent; in communications applications, generally expressed in decibels.

Transmitter The device in the telephone handset which converts speech into electrical impulses for transmission.

Transmitter Distributor A device in a teletypewriter system which converts the information from the parallel form in which it is used in the keyboard-printer to and from the serial form which it is transmitted on the transmission line.

Transmitter Start Code A coded control character or code sequence transmitted to a remate terminal instructing that terminal to begin sending information

Transmobile The transmobile (not to be confused with a TRANSPORTABLE) is another type of cellular phone. It is essentially a standard 3-watt mobile unit — without an external battery pack — that can be quickly and easily moved from one vehicle to another. It draws its power from the vehicle's battery via a cigarette lighter plug. See Bag Phone. Transmultiplexer A device that takes a bunch of voice analog phone conversa-Jons and converts them directly into a T-1 1.544 megabit per second bit stream but the need for de-multiplexing the bunches down to individual conversations, then digiizing them, then bundling them up into a T-1 digital bit stream. A transmultiplexer does it

Fransparency 1. A data communications mode that allows equipment to send and ceive bit patterns of virtually any form. The user is unaware that he is transmitting to a hachine that receives faster or slower, or transmits to him faster or slower, or in a differthat bit pattern. All the translations are done somewhere in the network. He is unaware of  $\cdot$ 

transparency "Transparent Communications" 1. A basic objective of telecommunitions systems, to make the transportation of information invisible to the user.

In data communications, a suspension of control character recognition in certain systems hile information transfer is in progress.

transparency/Opacity An imaging term. A setting available in many image-accessing functions that allows part of the underlying image to show through. 80 percent baity is equivalent to 20 percent transparency.

**Tensparent** Fine or sheer enough to be seen through. Something that is trans-tim exists for some reason, but is invisible, or headly so, in other words, it does not put or affect the users' operation of the system or feature. In fact, the user need not tract with the transparent feature, and generally is totally unaware that it exists. Think pane of glass that serves to protect the interior of a building and its occupants from elements, but does not affect the users' ability to see through it.

ien applied to telephone communications, the term is used to characterize the provision feature or service such as Automatic Route Selection in a such a way that the user is ware of it and it has no affect on the way he uses the telephone. It's "transparent" to Translations, for example, are transparent to the telephone user. Similarly, protocol ersions are transparent. See also Translations, Transparency, and Virtual

**Parsparent Bridging** Transparent bridging is so called because the intelli-tion necessary to make relaying decisions exists in the bridge itself and is thus "transant" to the communicating workstations. It involves frame forwarding, learning workion addresses and ensuring no topology loops exist.

insparent GIF Transparent GIFs are useful because they appear to blend in outly with the user's display, even if the user has set a background color that differs that the developer expected. They do this by assigning one color to be transparent the Web browser supports transparency, that color will be replaced by the browser's fround color, whatever it may be.

isparent Image An image that has had one color, usually the background, nated as 'transparent,' so that when the image is displayed in a browser, the image's ground is colored with the browser's background color. The effect is an image that hot have a visible rectangular background.

Transparent Mode 1. The operation of a digital transmission facility during the user has complete and free use of the available bandwidth and is unaware of am, mediate processing. Generally implies out-of-brand signaling (also called Clear Chara 2. In BSC data transmission, the suppression of recognition of control characters, to transmission of raw binary data without fear of misinterpretation.

3. An operational mode supported by the T3POS PAD which enables the use of e; credit authorization and data capture link level protocols. This mode requires minimal ifications to the POS (Point Of Sale) terminal, and no modification to the ISP/Credi Association (CCA) host system software.

Transparent Networking Transport INT. A service for transport LAN data across WANs in which all responsibility for the WAN transport is assumed I WAN and is therefore invisible to the LAN

Transparent Routing A method used by a bridge for moving data betwee networks. With this type of routing, the bridge learns which computers are operati which network. It then uses this information to route packets between networks. It not rely on the sending computers for its decision-making routine. A special kind of : combines the practice of transparent routing with source routing. It is called a source ing transparent (SRT) bridge. It examines each packet that comes by to see if it is IBM's special source routing protocol. If so, this protocol is used to forward the pac not, the transparent method is used. Thus, the SRT bridge will support both IBM an IBM network protocols. See also Bridge and SRT. Compare with Source Routing.

**Transponder** There are two meanings: 1. A transponder is a fancy name for relay equipment on board a communications satellite. Just like its domestic miar counterpart (which you see along highways), a transponder will receive a signal, a it, change its frequency and then send it back to earth. Transponders typically have 36 bandwidth. Full motion, full color TV video requires a 6 MHz analog channel. transponder on an airline is a slightly different kettle of fish. When a radar signal str airline, it activates an electronic transmitter called a transponder. The transponder sen a coded signal to the ground radar. The code appears next to the radar image of the t allowing the controller to identify each plane under his control.

Transport Driver A network device driver that implements a protocol for municating between Lan Manager and one or more media access control drivers. The port driver transfers Lan Manager events between computers on the local area netw Transport Efficiency An AT&T term for the ability to carry information th a network using no more resources than necessary. Transport efficiency is achieve example, by statistical transport, which removes silent intervals from voice, data or traffic and carries only the bursts of meaningful user information.

Transport Layer Layer 4 in the Open Systems Interconnection (OSI) data munications reference model that, along with the underlying network, data link and ical layers, is responsible for the end-to-end control of transmitted information and the mized use of network resources. Layer 4 defines the protocols governing message ture and portions of the network's error-checking capabilities. Also serves the session Software in the transport layer checks the integrity of and formats the data carried t physical layer (layer 1, the network wiring and interface hardware), managed by the link layer (layer 2) and possibly routed by the network layer (layer 1, which has the determining the path to be taken by data flowing through a network). See OSI.

**Transport Level** Level 4 of the Open System Interconnection (OSI) mode Transport level allows end users to communicate oblivious to network constraints im by the lower levels. Passes data from the Session level on to the Network Leve ensures that the data reaches the other end. Level 4 also provides for flow manager Transport Medium The actual medium over which transmission takes ( Transport media include copper wire, fiber optics, microwave and satellites.

Transport Overhead 1.728 MB/s of bandwidth allocated within each S STS-1 channel to carry alarm indications, status information, and message signaling nels for the preventive and reactive maintenance of SONET transmission (Transport) Transport Protocol A protocol that provides end-to-end data integrity and ice quality on a network. Windows 95 Resource Kit defines transport protocol as how should be presented to the next receiving layer in the networking model and package data accordingly. It passes data to the network adapter driver through the NDIS inte See also Transport Protocol Class Four.

Transport Protocol Class Four TP4. An International Stan Organization (ISO) transport layer protocol designated as ISO IS 8073 class Four St TP4 has been adopted by the U.S. Department of Defense and specified in the